APPENDIX D
CRITICAL CONDITIONS

To determine whether an assessment unit is no longer impaired, samples must be collected during critical conditions and at critical locations. These conditions and locations were either noted in the TMDL investigations or are based on other factors, such as the fish consumption advisory action level. As TMDLs are completed, more waters will be added to this list.

ASSESSMENT UNIT DESCRIPTION REACH NUMBER	PARAMETERS	TMDL STATUS	CRITICAL CONDITIONS	CRITICAL SITES OR LOCATIONS (ADEQ site number)
Bill Williams Watershed				
Alamo Lake 15030204-0040	Mercury in fish	Data summary being developed	Methylmercury concentration in fish tissue <0.3 mg/kg	Largemouth bass, black crappie, channel catfish mercury concentrations
Boulder Creek From Wilder Creek to Copper Creek 15030202-005A	Copper, Zinc, Arsenic	Completed 2004	Stream flow less than 0.75 cfs, which is low flow, intermittent, or "base flow"	Below Hillside Mine - 101010 Below MTP- 101011 Below UTP- 101439 Above Hillside Mine - 102023
Colorado – Grand Canyon Watershed				
No waters				
Colorado – Lower Gila Watershed				
No waters				
Little Colorado Watershed				
Bear Canyon Lake 15020008-0130	pH	Delist report being developed	Determine if lake meets narrative nutrient criteria once narrative nutrient implement procedures are adopted.	At dam- 100969 Mid lake- 100970
Upper Lake Mary and Lower Lake Mary 15020015-0890 15020015-0900	Mercury in fish	Completed 2011	Methylmercury concentration in fish tissue <0.3 mg/kg	Fish tissue mercury concentrations
Little Colorado River (near Nutrioso Creek) 15020001-009, -010	Turbidity	Completed 2002	Winter-spring runoff at approximately 29 cfs and summer runoff at approximately 13 cfs	Near USGS gage 09383400 - 101174
Long Lake 15020008-0820	Mercury in fish	Completed 2011	Methylmercury concentration in fish tissue <0.3 mg/kg	Fish tissue mercury concentrations
Lyman Lake 15020001-0850	Mercury in fish	Data summary being developed	Methylmercury concentration in fish tissue <0.3 mg/kg	Walleye, largemouth bass and channel catfish mercury concentrations
Nutrioso Creek From headwaters to Little Colorado River 15020001-017, -015	Turbidity	Completed 2000	Spring runoff at approximately 4 to 14 cfs	Big Wall site - 102112 Old background site - 101982
Rainbow Lake 15020005-1170	Nutrients (N&P) and pH	Completed 2000	Low lake level. Determine if lake meets narrative nutrient criteria once narrative nutrient implement procedures are adopted.	At dam- 100069 Mid lake- 100070 Walnut inlet- 105805
Soldier's Annex Lake 15020008-1430	Mercury in fish	Completed 2011	Methylmercury concentration in fish tissue <0.3 mg/kg	Fish tissue mercury concentrations
Soldier's Lake 15020008-1440	Mercury in fish	Completed 2011	Methylmercury concentration in fish tissue <0.3 mg/kg	Fish tissue mercury concentrations

ASSESSMENT UNIT DESCRIPTION REACH NUMBER	PARAMETERS	TMDL STATUS	CRITICAL CONDITIONS	CRITICAL SITES OR LOCATIONS (ADEQ site number)
Middle Gila Watershed				
French Gulch From headwaters to Hassayampa River 15070103-239	Copper, cadmium, zinc	Completed 2005	Storm induced runoff from inactive mine	Below Zonia Mine - 101620
Gila River Centennial Wash to Gillespie Dam 15070101-008	Selenium, boron	Completed 2015	Irrigation reuse and return flows	Irrigation and permit outfalls Gila River abv Gillespie- 100734
Hassayampa River From headwaters to Copper Creek 15070103-007A	Cadmium, copper, zinc	Completed 2002	Low flow and spring runoff (approximately 4 to 6 cfs)	Above McCleur Mine – 101816 Below McCleur Mine - 101817 Above Cash Mine trib - 101067 Below Cash Mine trib - 101065
Queen Creek From headwaters to Superior Mine discharge 15050100-014A, -014B	Copper	TMDL under development	Storm induced runoff	Queen Creek at Magma- 103095 Queen Creek at Mary Drive- 103461 Queen Creek at Queen station- 103098
Turkey Creek From headwaters to Poland Creek 15070102-036B	Cadmium, copper, zinc, lead	Completed 2005	Storm induced runoff, snow melt and base flow do not cause impairment	101627- Above Golden Belt and Turkey mines 101251- Below mines
Salt Watershed				
Christopher Creek and upper Tonto Creek 15060105-353, -013A, -013B	E. coli	Completed 2004	Summer recreation season	Tonto below Bear Flat- 100358 Tonto above Christopher- 100359 Christopher above Tonto- 101034
Christopher Creek and upper Tonto Creek 15060105-353, -013A, -013B	Nitrogen	Completed 2005	Summer recreation season	Tonto below Bear Flat- 100358 Tonto above Christopher- 100359 Christopher above Tonto- 101034
Pinto Creek From headwaters to Roosevelt Lake 15060103-018A, -018B, -018C	Copper	Site specific standard being adopted. Revised TMDL is drafted.	Storm induced runoff	Gibson Mine Tributary- 101071 PC-100- 101064
San Pedro Watershed				
Mule Gulch Headwaters to Whitewater Draw 15080301-090A, -090B, -090C	Copper	Effectiveness monitoring is ongoing	Storm induced runoff	Mule Gulch (MG-100)- 102489 Mule Gulch (MG-150)- 102490 Mule Gulch (MG-200)- 102491
3 R Canyon From headwaters to Sonoita Creek 15050301-558A, -558B, -558C	Cadmium, copper, zinc, pH	Completed 2003	Storm induced runoff	Cox Gulch below Trib- 100869 3R below Spring- 100872 3R below Cox Gulch- 100322

ASSESSMENT UNIT DESCRIPTION REACH NUMBER	PARAMETERS	TMDL STATUS	CRITICAL CONDITIONS	CRITICAL SITES OR LOCATIONS (ADEQ site number)
Santa Cruz Watershed				
Alum Gulch From headwaters to Sonoita Creek 15050301-561A, -561B	Cadmium, copper, zinc, pH	Completed 2003	Storm induced runoff	Alum below World's Fair- 100870 Alum below January Adit- 100838 Humboldt above Alum- 106542
Arivaca Lake 15050304-0080	Mercury in fish	Completed 1999	Methylmercury concentration in fish tissue <0.3 mg/kg	Fish tissue mercury concentrations
Harshaw Creek From headwaters to ephemeral reach 15050301-025A	Copper, pH	Completed 2003	Storm induced runoff	Below Trench Camp- 100319 Below Endless Chain- 100848
Lakeside Lake 15050302-0760	Nitrogen, phosphorus, chlorophyll, low DO, ammonia	Completed 2005	Nutrient levels is reclaimed water discharges	Mid lake- 100035
Parker Canyon Lake 15050301-1040	Mercury in fish	Data summary under development	Methylmercury concentration in fish tissue <0.3 mg/kg	Largemouth bass, bluegill, pike mercury concentrations
Pena Blanca Lake 15050301-1070	Mercury in fish	Completed 1999	Methylmercury concentration in fish tissue <0.3 mg/kg	Fish tissue mercury concentrations
Upper Gila Watershed				
Gila River Multiple reaches from New Mexico Border to Bonita Creek	E. coli, SSC	Completed 2012/2013	Storm flows	Gila at Safford Valley- 100729 San Francisoc River- 100382 Gila at New Mexico border- 100808 Gila at Duncan- 103587
Luna Lake 15040004-0840	Nutrients (N&P), pH, and dissolved oxygen	Completed 2000	Low lake levels. Determine if lake meets narrative nutrient criteria once narrative nutrient implement procedures are adopted.	At dam- 100036 Mid lake- 100979
Verde Watershed				
Granite Creek Watershed (multiple streams and tributaries)	E. coli	Completed 2015	Storm water runoff, elevated flows following spring melt	Various sites thoughout watershed
Oak Creek Headwaters to Spring Creek	E. coli	Completed 2010	Summer recreational season, storm water runoff	Various sites throughout the watershed
Pecks Lake 15060202-1060	Nutrients (N&P), pH, dissolved oxygen	Completed 2002	Determine if lake meets narrative nutrient criteria once narrative nutrient implement procedures are adopted.	At dam- 100511 Mid lake- 100063
Stoneman Lake 15060202-1490	Nutrients (N&P), pH, and dissolved oxygen	Completed 2000	Ephemeral lake. Do not assess if depth less than 1 meter. Determine if lake meets narrative nutrient criteria once narrative nutrient implement procedures are adopted.	At dam- 100086 Mid lake- 100698
Verde River Multiple reaches from Cottonwood Creek to Fossil Creek	Turbidity	Completed 2002	Storm induced runoff, approximately 1180 cfs.	USGS gage near Clarkdale 0950400 - 100738
Watson Lake 15060202-1590	Nitrogen, dissolved oxygen, pH	TMDL under development	Determine if lake meets narrative nutrient criteria once narrative nutrient implement procedures are adopted.	At dam- 101353 Mid lake- 101354 South end- 102564